

EUROPEAN PATENT OFFICE

Patent Abstracts of Japan

PUBLICATION NUMBER : 11028593
PUBLICATION DATE : 02-02-99

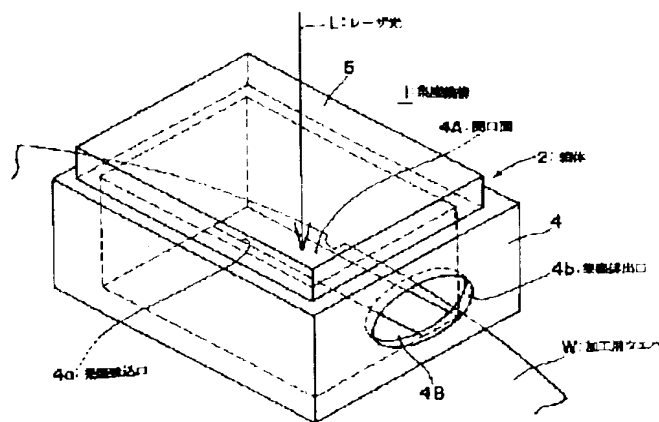
APPLICATION DATE : 09-07-97
APPLICATION NUMBER : 09183581

APPLICANT : NEC CORP;

INVENTOR : TAKAHASHI FUMITAKE;

INT.CL. : B23K 26/16 H01L 21/02 H01L 21/66
H01L 21/68 // B08B 15/04

TITLE : DUST COLLECTING MECHANISM FOR
LASER MARKING DEVICE



ABSTRACT : PROBLEM TO BE SOLVED: To collect dust particles sufficiently and to improve dust collecting efficiency by making the dust collecting suction inlet of a box for transmitting laser beam consist of a dust collecting suction inlet having a surface of opening opposite to a laser marking area for machining wafer.

SOLUTION: The dust particles collecting by means of the dust collecting mechanism of laser marking device is executed by keeping a box 2 at a positional height about 2-3 mm apart from the machining wafer W. The particles floating in the air above the machining wafer W and the particles, which are dispersed from the machining wafer W and soon fall down, are taken into the box 2 through a small surface of opening 4A opposite the laser marking area and through a dust collecting intake 4a, and then discharged out of the box 2 through a collected dust discharging outlet 4b. It is also preferable to connect a dust collecting pump to the collected dust discharging outlet 4b and to hold dust collecting filters between the two. Thereby, the particles are sufficiently collected and dust collecting efficiency is improved.

COPYRIGHT: (C)1999,JPO